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| 09/821,321 | 03/29/2001 | Hidehiko Teshirogi | 450100-03092 | 2271 |
| 20999 | 7590 | 05/03/2006 | EXAMINER | |
| FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151 | | | NGUYEN, HUY THANH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2621 | |

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,321

Applicant(s)

TESHIROGI ET AL.

Examiner

HUY T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 January 2006 has been entered.

Claim Objections

2. Claims 1, 7 is objected to because of the following informalities:

In claims 1,5,6,7,9 and 10, it is not clear to what "they " and "therebetween " referencing . Are "they" and "therebetween" referencing to "unit" or "pictures" or "audio data" or both "unit" and "audio data"?

Claim 1, 5,6,7,9 and 10, it is not clear what is meant by "SB" in the claims.

Claim 7, line 2, claim 9, line 2 and claim 10, line 3 before "compressed" needed to be inserted --a--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguro (6,026,212) in view of Yamada et al (6,115,537) and Kawakami et al (6,421,091).

Regarding claim 1 Oguro discloses a magnetic-tape recording apparatus (column 1, lines 15-40, Fig. 9 column 8, line 50-column 9, lines 45) for recording digital data on a magnetic tape(20) by a rotating head)11) , comprising:

first obtaining means (5,67) for obtaining predetermined-unit video data sync block (column 1, line 15-40);

second obtaining means (9) for obtaining audio data corresponding to the predetermined-unit video data (Fig. 1);

synthesizing means (8) for synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape without any space disposed therebetween (Fig. 1, column 1) ; and

sending means for sending data synthesized by the synthesizing means to the rotating head in order to record the data on the magnetic tape (Fig. 1, column 1) .

Oguro fails to specifically teach using sync block header having information to identify whether the main data is audio data or video data.

Yamada teaches an recording/ reproducing apparatus having means for providing the main data with a sync block header to identify whether the main data is audio or video data (column 29, lines 15-25 Fig. 5D)

It would have been obvious to one of ordinary skill in the art to modify Oguro with Yamada by providing the apparatus of Oguro with a generating means as taught by Yamada for generating sync block header having information to identify the main data thereby effectively accessing the main data .

Oguro as modified with Yamada fails to specifically teaches using error correction code with video data or audio data .

Kawakami teaches an recording apparatus having means for generating error correction code using with the video units or audio data (Figs. 5-7 , column 11).

It would have been obvious to one of ordinary skill in the art to modify Oguro as modified with Yamada with Kawakami by using a error correction code as taught by Kawakami with the apparatus of Oguro for generating error correction code to

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identify and correct the error in the video data and audio data thereby enhancing the capacity of the apparatus of Oguro in improving the quality of the video data and audio data.

Method claims 5 and 6 correspond to apparatus claim 1. Therefore method claims 5 and 6 are rejected by the same reason as applied to apparatus claim 1.

Further for claim 6, Oguro teaches a program stored on a medium for performing the method of claim 6 since the generating audio and video data, arranging the audio and video on the tape is controlled by a controller of the apparatus.

Regarding claim 7, Oguro teach a reproducing apparatus for reading by a rotating head a magnetic tape into which compressed, high quality or standard. predetermined-unit, video data and audio data corresponding to the predetermined-unit video data are recorded such that they are continuous on a track without any space disposed therebetween (Fig. 1, Fig. 19) comprising:

first decompression means (26,26) for decompressing the compressed, high-quality video data among data read from the magnetic tape by the rotating head (column 13, lines 1-5, column 15, lines 59-65) ;

second decompression means (23) for decompressing the compressed audio data among the data read from the magnetic tape by the rotating head (column 12, lines 30-5) ;

detecting means (22) for detecting distinguish information for distinguishing the video data from the audio data, from the data read from the magnetic tape by the rotating head (column 12, lines 35-40) ; and

selection means (22) for selecting the first decompression means or the second decompression means according to the result of detection performed by the detecting means to process the data read from the magnetic tape by the rotating head (column 12, lines 30 65).

Oguro fails to specifically teach using sync block header having information to identify whether the main data is audio data or video data.

Yamada teaches an recording/ reproducing apparatus having means for providing the main data with a sync block header to identify whether the main data is audio or video data (column 29, lines 15-25 Fig. 5D)

It would have been obvious to one of ordinary skill in the art to modify Oguro with Yamada by providing the apparatus of Oguro with a generating means as taught by Yamada for generating sync block header having information to identify the main data thereby effectively accessing the main data.

Oguro as modified with Yamada fails to specifically teaches using error correction code with video data pr audio data .

Kawakami teaches an recording apparatus having means for generating error correction n code using with the video units or audio data (Figs. 5-7 , column 11).

It would have been obvious to one of ordinary skill in the art to modify Oguro as modified with Yamada with Kawakami by using a error correction code as taught by

Kawakami with the apparatus of Oguro for generating error correction code to identify and correct the error in the video data and audio data thereby enhancing the capacity of the apparatus of Oguro in improving the quality of the video data and audio data.

Method claims 9 and 10 correspond to apparatus claim 7. therefore method claim 9 and 10 are rejected by the same reason as applied to apparatus claim 7.

Further for claim 10 ,Oguro teaches a program stored on a medium for performing the method of claim 10 since the generating audio and video data , arranging the audio and video on the tape , decompressing the video data and audio data is controlled by a controller of the apparatus.

5. Claims 1,4-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkuma et al in view of Yamada et al (6,115,537) and Kawakami et al (6421091).

Regarding claim 1, Ohkuma discloses a magnetic-tape recording apparatus (Fig. 14,15 a, column 11) for recording digital data on a magnetic tape by a rotating head, comprising:

first obtaining means (233) for obtaining predetermined-unit video data (Fig. 23);

second obtaining means (204,205) for obtaining audio data corresponding to the predetermined-unit video data (Fig. 23);

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synthesizing means (207) for synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape; and

sending means for sending data synthesized by the synthesizing means to the rotating head in order to record the data on the magnetic tape (column 11, Fig. 23) .

Ohkuma fails to teach that the video and audio are provided without any space therebetween .

However, it is noted eliminating a part that will cause losing its function is obvious to one of ordinary skill in the art (See Elimination of an element and its function---*In re Karlson*, 153 USPQ 184 (CCPA 1963).. Therefore, it would have been obvious to one of ordinary skill in the art to modify Ohkuma by eliminating the gap generating means of Ohkuma thereby eliminating the space between the video data and audio data.

Ohkuma fails to specifically teach using sync block header having information to identify whether the main data is audio data or video data.

Yamada teaches an recording/ reproducing apparatus having means for providing the main data with a sync block header to identify whether the main data is audio or video data (column 29, lines 15-25Fig. 5D)

It would have been obvious to one of ordinary skill in the art to modify Ohkuma with Yamada by providing the apparatus of Ohkuma with a generating means as taught by Yamada for generating sync block header having information to identify the main data thereby effectively accessing the main data.

Ohkuma as modified with Yamada fails to specifically teaches using error correction code with video data or audio data .

Kawakami teaches an recording apparatus having means for generating error correction code using with the video units or audio data (Figs. 5-7 , column 11).

It would have been obvious to one of ordinary skill in the art to modify Ohkuma as modified with Yamada with Kawakami by using a error correction code as taught by Kawakami with the apparatus of Ohkuma for generating error correction code to identify and correct the error in the video data and audio data thereby enhancing the capacity of the apparatus of Ohkuma in improving the quality of the video data and audio data.

Regarding claim 4, Ohkuma further teaches third obtaining means (19, Fig. 15 b) for obtaining. as the video data, compressed standard video data, wherein the high-quality video data obtained by the first obtaining means includes distinguish information for distinguishing the high-quality video data from the standard video data (column 13, lines 35-40); and

the synthesizing means selects the high-quality video data compressed by the compression means or the compressed standard video data obtained by the third obtaining means and synthesizes (column 13, lines 50 to column 14, line 6.

Method claims 5 and 6 correspond to apparatus claim 1. Therefore method claims 5 and 6 are rejected by the same reason as applied to apparatus claim 1.

Further for claim 6, Ohkuma teaches a program stored on a medium for performing the method of claim 6 since the generating audio and video data ,

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arranging the audio and video on the tape is controlled by a controller of the apparatus.

Regarding claim 7, Ohkuma further teaches apparatus for reading by a rotating head a magnetic tape into which compressed, high quality or standard. predetermined-unit, video data and audio data corresponding to the predetermined-unit video data are recorded such that they are continuous on a track (Figs. 14-15,22,23) comprising:

first decompression means (235) for decompressing the compressed, high-quality video data among data read from the magnetic tape by the rotating head;

second decompression means (221) for decompressing the compressed audio data among the data read from the magnetic tape by the rotating head (column 11 lines 10-40, lines 55-65) ;

detecting means (220) for detecting distinguish information for distinguishing the video data from the audio data, from the data read from the magnetic tape by the rotating head (column 11, lines 45-68) ; and

selection means for selecting the first decompression means or the second decompression means according to the result of detection performed by the detecting means to process the data read from the magnetic tape by the rotating head (column 11 lines 10-40, lines 45-65).

Ohkuma fails to teach that the video and audio are provided without any space therebetween .

However, it is noted eliminating a part that will cause losing its function is obvious to one of ordinary skill in the art (See Elimination of an element and its function---*In re Karlson*, 153 USPQ 184 (CCPA 1963).. Therefore, it would have been obvious to one of ordinary skill in the art to modify Ohkuma by eliminating the gap generating means of Ohkuma thereby eliminating the space between the video data and audio data.

Ohkuma fails to specifically teach using sync block header having information to identify whether the main data is audio data or video data.

Yamada teaches an recording/ reproducing apparatus having means for providing the main data with a sync block header to identify whether the main data is audio or video data (column 29, lines 15-25Fig. 5D)

It would have been obvious to one of ordinary skill in the art to modify Ohkuma with Yamada by providing the apparatus of Ohkuma with a generating means as taught by Yamada for generating sync block header having information to identify the main data thereby effectively accessing the main data

Ohkuma as modified with Yamada fails to specifically teaches using error correction code with video data pr audio data .

Kawakami teaches an recording apparatus having means for generating error correction n code using with the video units or audio data (Figs. 5-7 , column 11).

It would have been obvious to one of ordinary skill in the art to modify Ohkuma as modified with Yamada with Kawakami by using a error correction code as taught by Kawakami with the apparatus of Ohkuma for generating error correction code to

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identify and correct the error in the video data and audio data thereby enhancing the capacity of the apparatus of Ohkuma in improving the quality of the video data and audio data.

Method claims 9 and 10 correspond to apparatus claim 7. therefore method claim 9 and 10 are rejected by the same reason as applied to apparatus claim 7.

Further for claim 10 ,Ohkuma teaches a program stored on a medium for performing the method of claim 10 since the generating audio and video data , arranging the audio and video on the tape , decompressing the video data and audio data is controlled by a controller of the apparatus.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkuma et al (5,574,570) in view of Yamada et al (6,115,537) and Kawakami et al (6421091) as applied to claims 1 above, further in view of Lee (5,940,016) .

Regarding claim 2, Ohkuma further teach a compression means (23, Fig. 14) for compressing the high-quality video data obtained by the first obtaining means, wherein the first obtaining means obtains as the video data, high-quality video data (column 11), but fails to teach that the predetermined-unit video data is the data of pictures whose number is indicated by the value of M in a GOP structure.

Lee teaches a high quality video signal is a GOP (MPEG system, column 1 lines 5-32)) that each GOP having a M pictures . It would have bee obvious to one of ordinary skill in the at to modify Ohkuma with Lee by providing the Okuma apparatus

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a high quality video signal that comprises GOPs as taught by Lee as alternative source signal thereby enhancing the apparatus of Ohkuma for additionally receiving the high quality video signal of GOP .

Regarding claim 3, Ohkuma as modified with Lee further teaches a magnetic tape recording apparatus according to the compression means compresses the high-quality video data by an MP@HL or MP@H-14 method . See Lee column 6, lines 20-25).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkuma et al (5,574,570) in view of Yamada et al (6,115,537) and Kawakami et al as applied to claims 7 above, further in view of Lee (5,940,016) .

Regarding claim 8, Ohkuma fails to teach that the first decompression means decompresses the high-quality video data by an MP@HL or MP@H-14 method.

Lee teaches a decompressing means using an MP@HL or MP@H-14 method. For decompressing a high quality video signal hat a high quality video signal (See Lee column 6, lines 20-5). It would have been obvious to one of ordinary skill in the art to modify Ohkuma with Lee by providing the Okuma apparatus with a decompressing means for decompressing the high quality video signal as an alternative to the decompressing means of Ohkuma in the case that the high quality video signal has been compressed by MP@HL or MP@H-14 method of MPEG system . Thereby enhancing the capacity of the apparatus of Ohkuma .

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8. Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senshu et al (6,658,195) in view of Yamada et al (6,115,537) and Kawakami et al ((6421091) .

Regarding claim 1, Senshu discloses a magnetic-tape recording apparatus (Figs. 2 and 3), comprising:

first obtaining means for obtaining predetermined-unit video data sync block (column 5, lines 5-45);

second obtaining means for obtaining audio data corresponding to the predetermined-unit video data (column 5, lines 5-45);

synthesizing means (8) for synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape without any space disposed therebetween (Fig. 3). ; and

sending means for sending data synthesized by the synthesizing means to the rotating head in order to record the data on the magnetic tape (Figs. 2 and 3)._

Senshu fails to specifically teach using sync block header having information to identify whether the main data is audio data or video data.

Yamada teaches an recording/ reproducing apparatus having means for providing the main data with a sync block header to identify whether the main data is audio or video data (column 29, lines 15-25Fig. 5D)

It would have been obvious to one of ordinary skill in the art to modify Senshu with Yamada by providing the apparatus of Senshu with a generating means as taught

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by Yamada for generating sync block header having information to identify the main data thereby effectively accessing the main data .

Senshu as modified with Yamada fails to specifically teaches using error correction code with video data or audio data .

Kawakami teaches an recording apparatus having means for generating error correction code using with the video units or audio data (Figs. 5-7 , column 11).

It would have been obvious to one of ordinary skill in the art to modify Senshu as modified with Yamada with Kawakami by using a error correction code as taught by Kawakami with the apparatus of Senshu for generating error correction code to identify and correct the error in the video data and audio data thereby enhancing the capacity of the apparatus of Senshu in improving the quality of the video data and audio data.

Method claims 5 and 6 correspond to apparatus claim 1. Therefore method claims 5 and 6 are rejected by the same reason as applied to apparatus claim 1.

Further for claim 6, Senshu teaches a program stored on a medium for performing the method of claim 6 since the generating audio and video data , arranging the audio and video on the tape is controlled by a controller of the apparatus.

Response to Arguments

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9. Applicant's arguments filed 11 August 2005 have been fully considered but they are not persuasive. Applicants argue that Oguro and Ohkuma fail to teach using error correction code for video data or audio data. In response, it is noted that generating error correction code and using the error correction code with video data or audio data is well known in the art.

Allowable Subject Matter

10. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

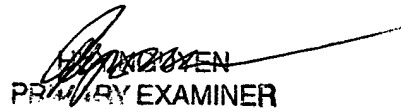
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N


H.N.
PRIMARY EXAMINER